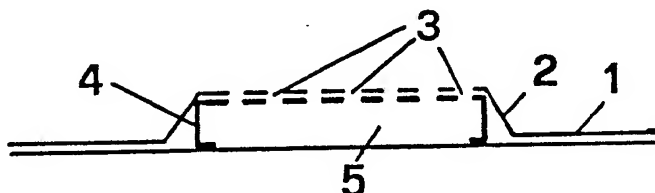




## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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<b>(21) International Application Number:</b> PCT/IT88/00006 <b>(22) International Filing Date:</b> 22 January 1988 (22.01.88) <b>(31) Priority Application Number:</b> 48594 A/87 <b>(32) Priority Date:</b> 9 November 1987 (09.11.87) <b>(33) Priority Country:</b> IT  <b>(71)(72) Applicants and Inventors:</b> CHECCONI, Pietro [IT/IT]; Via Maes, 68, I-00162 Roma (IT). MATTEUCCI, Domenico [IT/IT]; Via Montello, 30, I-00195 Roma (IT).  <b>(74) Agent:</b> MASCIOLI, Alessandro; A.N.D.I., Associazione Nazionale degli Inventori, Via Lima, 35, I-00198 Roma (IT).		<b>(81) Designated States:</b> AT (European patent), BE (European patent), CH (European patent), DE (European patent), FR (European patent), GB (European patent), IT (European patent), LU (European patent), NL (European patent), SE (European patent), US.  <b>Published</b> <i>With international search report.</i>

**(54) Title:** A TREATMENT PLASTER WITH AN INCORPORATED DISTANCER

**(57) Abstract**

The treatment plaster (1) comprises, in the area that gets into contact with the wound and usually provided only with the sterilized gauze, a distancer (4), consisting of a light structure provided with holes (3) like a net and out of materials like plastic, metal, cardboard or similar that will form an inner volume (5) below the plaster provided with holes for the free air circulation.

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"A treatment plaster with an incorporated distancer"

The present invention concerns a treatment plaster comprising an incorporated distancer that determines the distance  
5 between the area to be protected and the surface of said plaster.

It is already well known that the plasters used for protecting wounds, abrasions and similar from infection, even if  
10 having a layer of gauze or similar in that area being in contact with the wound, often prove to be difficult to remove as it may get stucked to the wound due to physiological humours, with painful consequences for the patients and delays in the healing process.

15 Furthermore, through the aeration openings and the thickness of the gauze, usually there is not the sufficient quantity of air and therefore of oxygen requested for a prompt healing.

20 It is the aim of the present invention to realize a treatment plaster that eliminates all above mentioned disadvantages.

25 The aim set forth is reached according to the present invention by means of a treatment plaster of known materials but comprising in that area that gets into contact with the wound usually covered only with the sterilized gauze, a distancer 4, consisting of a light structure provided with  
30 holes like a net out of materials like plastic, metal, card-

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board or similar, for forming an inner volume below the plaster provided with holes, for the free air circulation.

The considerable advantage of the present invention consists  
5 in the perfect functioning of the plaster according to the present invention which even if not very encumbersome, as the thickness of the incorporated distancer is of a few millimeters, avoids any contact with the wound or similar and allows a considerable aeration and keeps the internal area  
10 protected from dust and atmospherical bacteria.

In a variant, in the area protected by the distancer the layer of sterilized gauze may be provided.

15 The present invention will be described more in detail hereinbelow relating to the enclosed drawings in which some preferred embodiments are shown.

Figure 1, shows an axonometric external view of the treatment  
20 plaster with incorporated distancer.

Figure 2, shows an exploded axonometric view of the parts forming the plaster of the precedent figure.

25 Figure 3, shows a vertical section of the treatment plaster.

Figure 4, shows a variant of a distancer to be incorporated in a plaster.

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Figure 5, shows a plant, a lateral and an axonometric view of a punched plaster that may be folded so as to delimit the area to be protected.

- 5     Figure 6, shows an exploded axonometric view of a variant with a distancer having the shape of a bull of foamy material.

- 10     Figure 7, shows a plant and a section view of a variant of a malleable distancer that may be applied following to a curve determined by a manual pressure, as it is shown in the lateral view of figure 8.

- 15     Relating to the details of the figures, the object of the present invention comprises a plaster 1 of any shape and dimension, provided with a cavity 2 outwardly turned with aeration holes 3, in which a distancer 4 is housed that will form a space 5 in correspondence with the wound or similar to be protected.

- 20     Said distancer 4 may be realized with a small net of plastic material like a parallelepiped structure, or also of different materials and different shapes.

- 25     In a variant, said distancer may consists, as shown in figure 4, of a structure 6 being cylindric or ellipsoidal or rectangular or of any other shape, detached from the base and provided with aeration holes 7 which have the same function that the net of the precedent figures.

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In a further variant shown in figure 5, the protection space 5 is obtained without particular rigid structures, but the form of the distancer is determined by the punchings A-B-C-D performed during the realization of the same plaster, so as to obtained, following to the folding and adhesion (D) of the support ribs of a 'wheathered' structure, that will appropriately prevent the contact with the protected area.

10 Said protection area 5, in a variant of cheap realization as shown in figure 6, consists of the inner space of the distancer in the shape of a bull, being parallepiped or cylindric, out of foamy or rubber or expanded lastic materials, while the upper cover consists of the  
15 same structure of the plaster, with a layer of gauze or other disinfectant materials 9.

For what concerns the variant of figure 7, plaster 1 has the same structure as a usual one but has, out of  
20 one piece by realization, the layer of malleable material 10, that may be manually curved when used and remains in that shape so as to protect the underlying space 5.

25 Above mentioned distancers, of the net 4 kind or with holes 6, may usually be used also single for the protection of wounds and similar, and may not need be inserted into cavity 2 provided in said plaster, but

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simply being placed onto the area to be protected and the-  
reto fixed with a traditional plaster.

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CLAIMS

1. A treatment plaster characterized in that in an outwardly  
turned cavity (2), obtained in the plaster's structure, a  
5       distancer (4) is housed and fixed for forming and underly-  
ing space (5) in correspondence with the wound or similar  
to be protected.
2. A treatment plaster according to claim 1 characterized in  
10       that said cavity (2) is provided with aeration holes (3).
3. A treatment plaster according to claim 1 characterized in  
that said distancer (4) consists of a net of plastic ma-  
terial provided in a parallelepiped structure.
- 15       4. A treatment plaster according to claim 1 characterized in  
that said distancer (4) shows a structure (6) being cylin-  
dric or ellipsoidal or rectangular or of any other shape,  
lacking the base and provided with aeration holes (7).
- 20       5. A treatment plaster according to claim 1 characterized in  
that said net (4) or hole (6) distancers are applied for  
the protection of wounds and similar, without being neces-  
sarily inserted into cavity (2) provided in said plaster,  
25       but being placed above said area to be protected and the-  
reto fixed with parts of traditional plaster.
6. A treatment plaster according to claim 1 characterized in  
that the area (5) is obtained with a 'wheathered' structu-

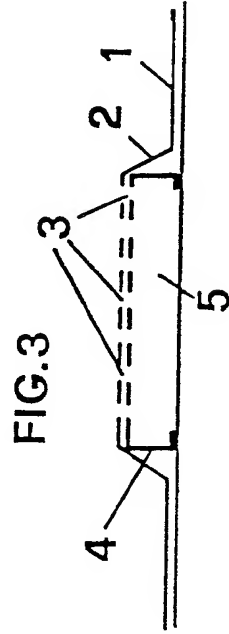
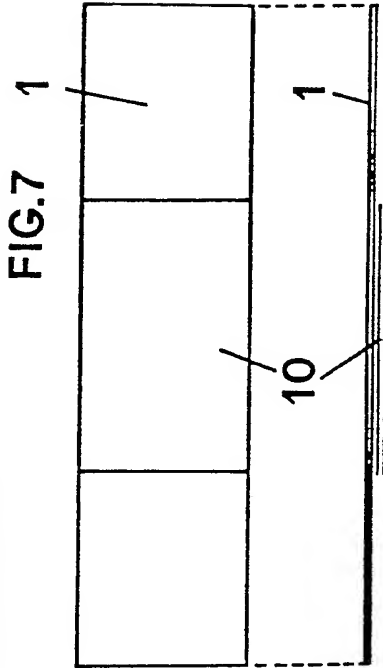
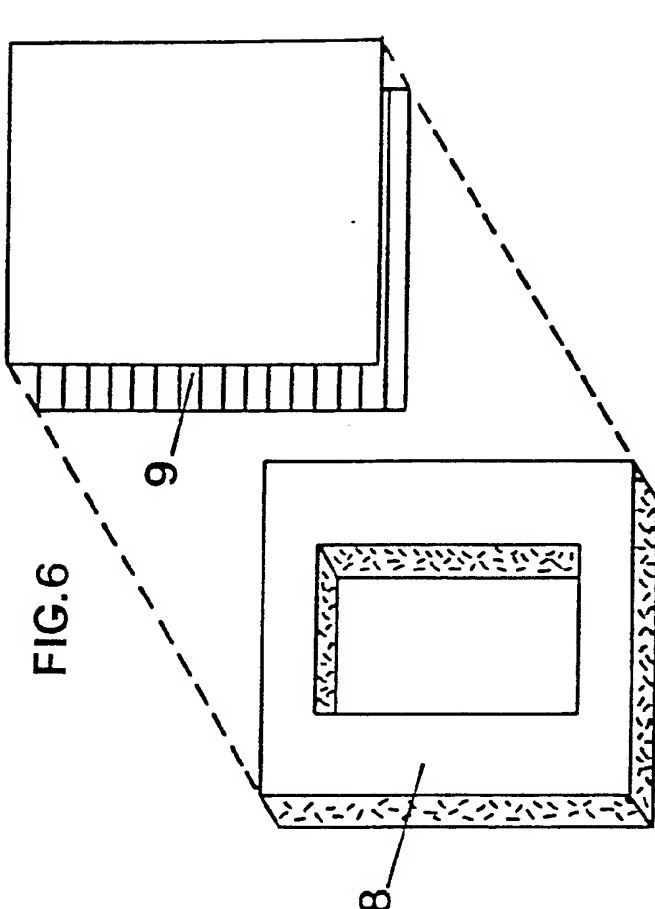
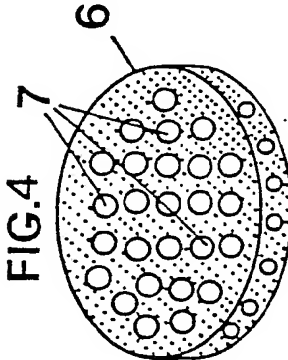
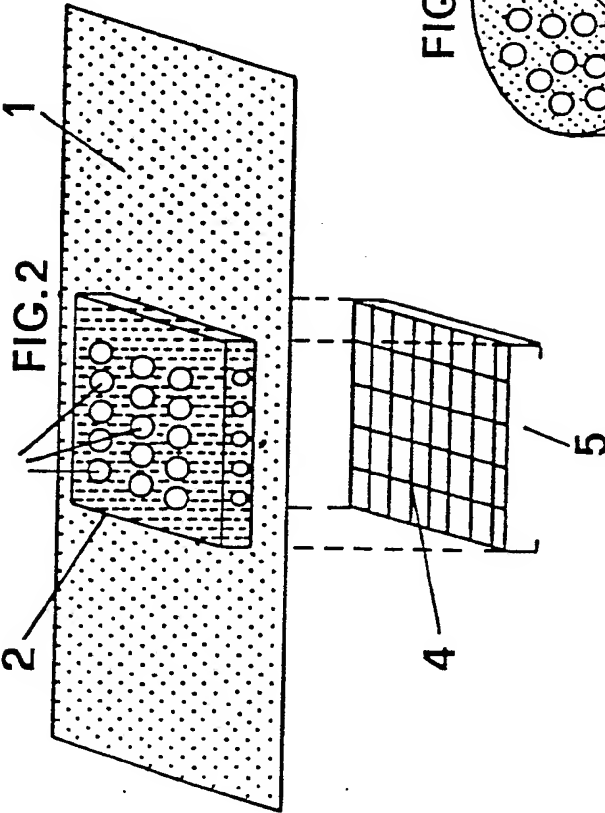
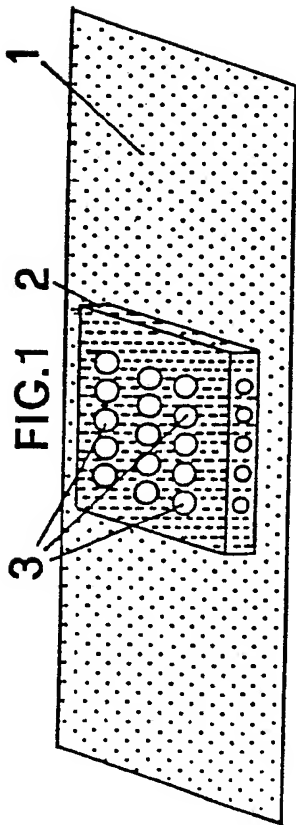


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re obtained by folding and adhesion of punchings (A, B, C and D).

5 7. A treatment plaster according to claim 1 characterized in that said distancer that will shape the protection area (5) consists in a parallelepiped or cylindric bull (8) of foamy expanded material, upwardly closed by the layer of disinfectant material (9) and by the same plaster.

10 8. A treatment plaster according to claim 1 characterized in that said protection area (5) is obtained following to a curving at the moment of use of the malleable material layer (10) provided in plane, out of one piece with said plaster at the moment of realization.



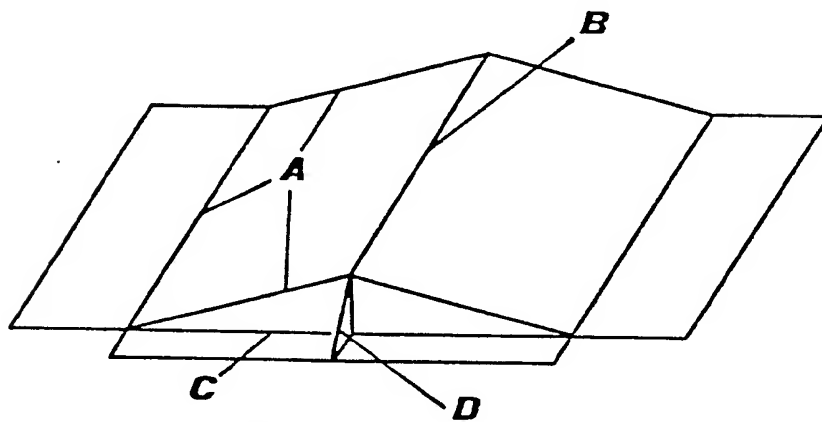
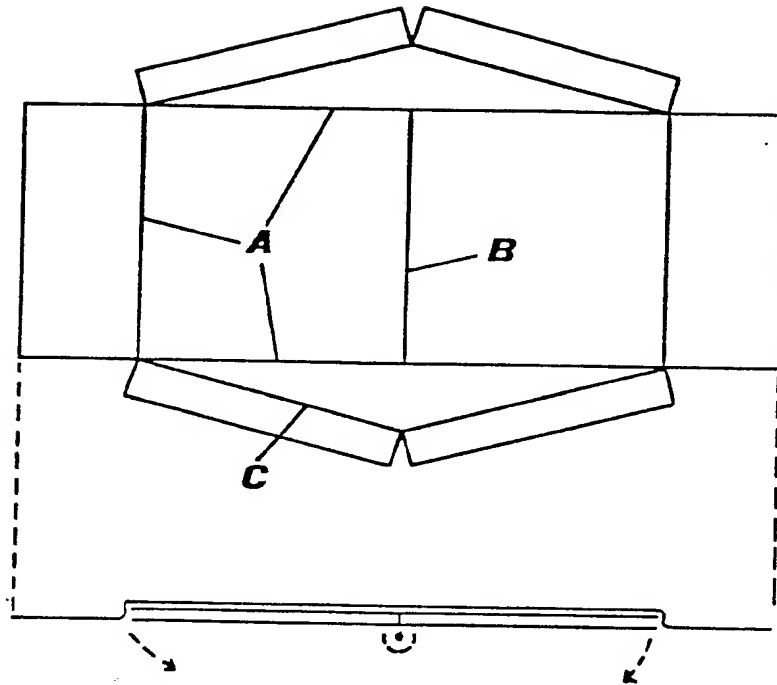



FIG. 5

# INTERNATIONAL SEARCH REPORT

International Application No PCT/IT 88/00006

<b>I. CLASSIFICATION OF SUBJECT MATTER</b> (if several classification symbols apply, indicate all) <sup>6</sup>		
According to International Patent Classification (IPC) or to both National Classification and IPC		
IPC <sup>4</sup> : A 61 F 13/02; A 61 F 15/00		
<b>II. FIELDS SEARCHED</b>		
Minimum Documentation Searched <sup>7</sup>		
Classification System	Classification Symbols	
IPC <sup>4</sup>	A 61 F	
Documentation Searched other than Minimum Documentation to the Extent that such Documents are Included in the Fields Searched <sup>8</sup>		
<b>III. DOCUMENTS CONSIDERED TO BE RELEVANT</b> <sup>9</sup>		
Category <sup>10</sup>	Citation of Document, <sup>11</sup> with indication, where appropriate, of the relevant passages <sup>12</sup>	Relevant to Claim No. <sup>13</sup>
X	US, A, 2098312 (SCHOLL) 9 November 1937, see the whole document	1,5
A	--	7
A	DE, A, 3102674 (WOLTER) 2 September 1982, see figures 1-4; page 4, lines 1-32	2,3,5,7
A	FR, A, 2584920 (MEYRIGNAC) 23 January 1987, see the whole document	3-5
A	US, A, 3334626 (SCHIMMEL) 8 August 1967, see the whole document	1,6
A	CH, A, 587049 (STOLLENWERK) 29 April 1977, see figures 1,4; column 2, lines 42-49	8
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<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p><sup>10</sup> Special categories of cited documents:</p> <p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier document but published on or after the international filing date</p> <p>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p> </div> <div style="width: 45%;"> <p>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step</p> <p>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.</p> <p>"Z" document member of the same patent family</p> </div> </div>		
<b>IV. CERTIFICATION</b>		
Date of the Actual Completion of the International Search	Date of Mailing of this International Search Report	
22nd June 1988	18 JUL 1988	
International Searching Authority	Signature of Authorized Officer	
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# ANNEX TO THE INTERNATIONAL SEARCH REPORT ON INTERNATIONAL PATENT APPLICATION NO.

IT 8800006

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This annex lists the patent family members relating to the patent documents cited in the above-mentioned international search report. The members are as contained in the European Patent Office EDP file on 07/07/88  
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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US-A- 2098312		None	
DE-A- 3102674	02-09-82	None	
FR-A- 2584920	23-01-87	None	
US-A- 3334626		None	
CH-A- 587049	29-04-77	NL-A- 7510381	09-03-76
		BE-A- 832981	02-03-76
		AT-B- 347575	10-01-79